UCONN | UNIVERSITY OF CONNECTICUT

CENTER FOR EDUCATION POLICY ANALYSIS, RESEARCH, AND EVALUATION (CEPARE)

The Costs and Benefits of Year-Round Schooling

Kristin Simmers

CEPARE Rapid Research Brief

July 2025

Year-round education (YRE) has gained attention as a potential solution to educational challenges such as learning loss, overcrowding, and equity gaps. Unlike traditional school calendars (TSCs), YRE redistributes the standard 180 school days and incorporates shorter, more frequent breaks across the calendar. While some YRE models aim to mitigate learning loss (Fitzpatrick & Burns, 2019) by delivering academic instruction throughout the year, existing studies suggest mixed results regarding their effectiveness at improving academic outcomes for broad student populations (Finnie et al., 2019). Other models of YRE aim to address overcrowding in schools by staggering students' schedules using multiple attendance tracks. Studies on these multi-track models suggest a small positive effect size in terms of student academic outcomes (Finnie et al., 2019).

The costs and benefits of YRE programs vary based on the type of YRE model being considered. For example, while potential benefits of single-track YRE models include narrowing achievement gaps (Finnie et al., 2019) and reducing summer learning loss (Fitzpatrick & Burns, 2019), studies suggest potential costs could include funding of intersession activities (Brown et al, 2012) and student difficulties adjusting to a nontraditional break schedule (Skinner, 2014). Furthermore, while districts that implement multi-track models to address overcrowding may find relief in staggering students' schedules (Graves, 2010), potential costs of this model may include a negative academic impact on students placed in poorly resourced tracks (Finnie, 2019). This brief examines YRE models and their respective goals, academic and operational benefits of adopting YRE models, the financial and logistical costs of implementation, and key considerations for districts exploring YRE.

Models and Goals of YRE Schooling

Common models for YRE programs include 45-15, 60-20, or 45-10 cycles composed of a predetermined number of days of instruction followed by intersessions, respectively. A YRE program can be implemented as a single-track system where all students share a common, one- to three-week intersession break between multi-week blocks of instruction (Fitzpatrick & Burns, 2019) or as a multi-track program with staggered school schedules that overlap (Finnie et al., 2019). For example, in a multi-track YRE system, a school may have four student tracks with schedules staggered so that at any given time, only three tracks are in school, and one track is on intersession. Coordinated schedules ensure all tracks receive the same number of instructional and intersession days throughout the year.

Both single and multi-track models typically shorten the summer break and provide one- to three-week intersessions spaced throughout the school year. A single-track YRE program may use intersessions to offer students remedial or enrichment instruction, as these models typically aim to improve student academic performance (Finnie et al., 2019). Alternatively, as multi-track models primarily aim to address overcrowding in schools, most of these programs do not include academic remediation during their intersession breaks (Skinner, 2014).

Benefits of YRE Schooling

Academic Benefits

Year-round education often aims to reduce summer learning loss, particularly for low-income students, by maintaining academic momentum (Fitzpatrick & Burns, 2019).

Studies suggest that YRE may narrow achievement gaps, but the impact is difficult to isolate from those that could be attributed to additional educational opportunities typically offered during intersessions. These can include remediation and enrichment opportunities, can vary in length and frequency, as well as attendance requirements.

A Virginia report found that specific student subgroups, such as Black and Hispanic students, showed greater improvements in YRE schools as compared to TSC schools. For example, 74% of YRE schools saw faster improvement in Black students' Standards of Learning (SOL) English test scores compared to TSC schools, as did 65% of YRE schools in Math (Brown et al., 2012). Other student subgroups at YRE schools that generally outperformed their TSC counterparts included students with limited English proficiency, economically disadvantaged students, and Hispanic students (Brown et al., 2012). Schools in the study offered additional instruction during intersessions, ranging from 19 to 30 total days, with an average attendance rate of 80%. Attendance varied widely, from 3% at one school to 96% at another. In some schools, students identified by staff as struggling academically were required or strongly encouraged to attend. No significant academic impact was observed for the general population (Brown et al., 2012).

Another study analyzed longitudinal data (1995-2005) from hundreds of public schools in California that implemented a calendar change during those eight years. The primary focus was to examine the academic impact of multi-track year-round school calendars compared to traditional calendars, specifically how calendar changes affected national percentile rankings in reading, math, and language standardized tests. The researcher used fixed effects models to control for selection bias and time-invariant characteristics, incorporating grade, school-level and census data, and analyzed critically overcrowded schools separately, to account for potentially confounding effects.

Results indicated a 1-2 percentile drop in national ranking for reading, math, and language scores, with the most negative impact in the first three years after adopting a multi-track calendar, and a greater negative impact in critically overcrowded schools.

A meta-analysis of 47 studies from 39 school districts from the years 1997-2000 examined the impact of modified school calendars on student achievement and community attitudes (Cooper et al., 2003). The findings suggest that while students, parents, and staff generally expressed positive attitudes toward the modified calendar, the academic impact was small, with YRE students performing only slightly better on standardized tests compared to TSC attendees (d = .06 to d = .11).

Single-track calendars generally showed slightly greater academic improvement than multi-track calendars in this analysis, but that result was not consistent in all studies.

Similarly, a case study used longitudinal data from over 50,000 students in grades 3-8 to analyze the impact of mandatory multi-track YRE in Wake County, North Carolina and showed no significant impact on average student achievement (McMullen & Rouse, 2012). This natural experiment included 126 schools that converted to multi-track YRE in 2007 to address over-crowding. Multi-level fixed effects models demonstrated that overall, math scores increased 1-2% (0.046 standard deviations) and reading score improvement was slightly lower (0.036 standard deviations) (McMullen & Rouse, 2012). Additionally, a recent systematic review of 39 studies found mixed results regarding student achievement. Specifically, 15 studies on single-track models showed modest to minimal academic gains (d = 0.19; 95% CI, 0.07–0.31) compared to TSCs, with some studies reporting no significant improvement. Conversely, eight studies of multi-track schools exhibited no significant difference in academic achievement (d = 0.04; 95% CI, -0.12 to 0.2), with findings ranging from small negative effects to slight benefits for specific groups. These findings suggest inconclusive evidence for the influence of YRE models on student achievement (Finnie et al., 2019).

Operational and Community Benefits

Multi-track, year-round education offers a cost-effective solution to overcrowding by increasing student capacity by 20-33% compared to a traditional school calendar (McMullen & Rouse, 2012) without requiring new construction (Skinner, 2014). Studies suggest that by eliminating the need for portable classrooms or school expansions, this approach can generate estimated cost savings of 5-15% (Graves, 2010). Some research also suggests distributed breaks may help alleviate teacher burnout (Cooper et al., 2003; Navolio, 2023). Anecdotal evidence from a year-round elementary school in Virginia supports this idea, where one teacher noted that under a traditional school calendar, they typically feel exhausted by April. In contrast, they said the structured breaks of a year-round schedule helped both teachers and students return to school refreshed and ready to learn (ASCD, 2003). However, empirical evidence on this effect remains limited. Year-round education may also provide more professional development opportunities during intersessions (Skinner, 2014), and in some cases, teachers may receive a stipend for meeting to plan during intersession breaks (ASCD, 2003).

Costs and Challenges of YRE

The costs of YRE vary by model. For example, general costs to consider within a single-track model may include those associated with intersessions, contract adjustments, or operational costs such as utility and transportation. Costs to consider within a multi-track model may include those associated with operations, logistical transitions, or schedule adjustments.

Single-track

Data on the financial cost of single-track year-round education remain limited, but researchers suggest there are several potential factors to consider. Costs tend to be higher in single-track schools if instruction is provided during intersessions. For instance, Virginia reported a "small to moderate" increase in expenses (ranging from 1–8%) in predominantly single-track YRE schools, with over 90% of this increase attributed to funding instruction during intersessions (Brown et al., 2012, p. 29). Operational expenses could also rise as administrative and maintenance staff transition from ninemonth to twelve-month contracts (Skinner, 2014). Furthermore, schools may face higher utility and transportation costs (Navolio, 2023). However, specific budget data for single-track schools beyond the year 2000 is scarce, and actual costs will vary depending on the context.

Community-related challenges associated with single-track year-round education schools are also not well-documented, but potential issues include disruptions to family schedules due to irregular vacation periods and difficulties in coordinating extracurricular activities that may take place during intersession breaks (Navolio, 2023; Skinner, 2014). Teachers may also be affected, as a shorter summer break could potentially discourage participation in summer professional development opportunities (Navolio, 2023).

Multi-track

Multi-track YRE is generally regarded as cost-saving overall, as it delays the need for new construction to address overcrowding (Graves et al., 2013) but there are still some potential financial costs to consider, such as higher operational expenses, including utilities and staffing (Navolio, 2023), as the schools adjust to 12 months of operation rather than nine. There could also be transitional costs incurred as schools shift from a TSC to multi-track YRE, such as professional development, administrative planning, or even storage space as teachers share teaching spaces (Graves et al., 2013). Researchers suggest that multi-track YRE offers the greatest cost-saving potential to crowded schools, and may be more expensive for schools that are not crowded, as the cost per pupil would be distributed among fewer students (Graves et al., 2013).

Non-financial challenges are not well-studied but could include difficulties in adjusting to non-traditional break schedules (Skinner, 2014), such as families that are accustomed to long summer breaks needing to plan for multiple, shorter breaks throughout the calendar year. Sibling coordination could be another challenge if a family has children on different school schedules (Skinner, 2014), as this may pose complications from attending intersessions on different weeks. Childcare is also a consideration, as there may be fewer options for childcare during intermittent intersession weeks compared to existing childcare options that are typically designed to accommodate the traditional summer break in a TSC (Skinner, 2014). Lastly, some students' summer employment opportunities could be reduced, as they would have fewer weeks available to work over the shortened summer break (Skinner, 2014). Additionally, there could be challenges with staff needing to share spaces and store materials, as well as a challenge completing maintenance at night and on weekends, as the building would rarely be free of students (California Department of Education, n.d.).

Case Studies

In the sections that follow, I describe one case of each YRE model implementation. The cases were selected based on recency and availability of data. Each case discusses the process for implementing the YRE model, the intended goals of the program, and the results of each implementation process.

Overall, the cases show how single-track models may offer benefits related to academic achievement, but present challenges related to implementing this transition at a larger scale. The multi-track case successfully reduced overcrowding, but districts faced challenges including community resistance to the abrupt calendar change.

Single-track: Greenwood

South Carolina's Greenwood 50 district was among the first in the state to implement YRE, adopting a single-track model in 2021 with the goal of improving low state test scores. Greenwood 50 saw remedial instruction during intersessions as an opportunity to help students catch up and prevent them from falling behind (Gregory & Turcotte, 2022). Attendance for these additional instructional days was optional, though the district invited 2,000 students who were identified as in need of additional academic support. During the first intersession, three remediation days were offered, and over half of the students who were invited attended—more than twice the district's typical summer school enrollment (Gregory & Turcotte, 2022). Schools in this district reported improvements in test scores, particularly in math, though specific results for that year are not reported (Gregory & Turcotte, 2022). However, according to the South Carolina Department of Education's results from the South Carolina College and Career Ready Assessments (SC READY) for students in grades 3-8, Greenwood 50 was highlighted as showing significant improvement from 2019 to 2024 (Greenwood 50, 2024).

The Greenwood district found 59% of parents and staff supported the calendar change, which was implemented in 2021-2022, and the following year 18 of South Carolina's 73 public school districts also adopted year-round calendars (Gregory & Turcotte, 2022). Of those schools, about half have added remediation days to their intersession calendars, averaging around nine remediation days throughout the year. Greenwood Public Schools saw higher attendance during intersessions than during summer school and reallocated some funding from summer school to support the intersessions (Gregory & Turcotte, 2022). However, Greenwood Public Schools superintendent Steve Glenn notes it is difficult to determine how much of students' academic improvement can be attributed to the single-track YRE system, as other initiatives such as smaller class sizes were implemented concurrently with the YRE model (Gregory & Turcotte, 2022). Additionally, more time is necessary to determine the full impact of the YRE calendar, as longitudinal data could contribute to a more thorough understanding of the model's long-term effects.

Multi-track: Wake County

Public schools in Wake County, North Carolina implemented mandatory YRE in 2007 to address rapid population growth, increasing the number of YRE schools from 14 to 42 in one year (Graves et al., 2013). While the primary goal was to address overcrowding in schools, an analysis of academic outcomes yielded mixed results. For example, analyses of end-of-grade test scores for students in grades 3-8 showed some overall improvements in math and reading assessments: overall math scores increased 0.046 standard deviations, and growth in math scores increased 0.026 standard deviations.

However, reading score effects were slightly lower, with a 0.036 standard deviation increase in scores and 0.017 standard deviation increase in growth. Furthermore, these effects were not statistically significant when controlling for student and school characteristics, such as class size and teacher experience (McMullen & Rouse, 2012). Yet among 22 schools that adopted multi-track YRE calendars, the average overcrowding rate decreased from 104.4% to 84.2%, suggesting the multi-track model was an effective solution to overcrowding. Despite its success, the calendar change was controversial among critics who felt the adoption of year-round education was too sudden. In 2007 alone, 22 schools switched to a multi-track YRE system, and all newly built schools were required to follow the same model.

This rapid expansion more than doubled the number of schools on a year-round calendar, bringing the total to 46 (McMullen & Rouse, 2012). The implementation was challenged in the North Carolina Supreme Court, where parents advocated that the districts be required to obtain parental consent before assigning students to year-round schools (McMullen & Rouse, 2012). Presently, Wake County actively involves parents in the school assignment process (Wake County Public School System, n.d.).

Recommendations for Districts Considering Year-Round Education

Rather than assuming one model fits all, districts should carefully assess their unique needs, engage stakeholders throughout YRE decision-making processes, and preemptively consider potential challenges to ensure a well-supported and effective YRE implementation. For districts considering adopting YRE schedules, the following recommendations are made:

- **Identify the district's primary goals**: Are districts considering YRE as a solution for addressing capacity challenges, improving academic outcomes, or both? What operational, financial, and community factors must be considered?
- Consider key stakeholders
 - **Educators & staff**: How will workload and professional development be affected? Will additional planning time or stipends be needed?
 - **Families & students**: What impact will modified break schedules have on childcare, extracurriculars, and summer employment? How can districts ensure equity in enrichment opportunities?
 - **Community & policy makers**: How will intersession funding, transportation, and facilities management be handled? What strategies will foster community buy-in?

Plan for implementation

- **Funding & operations**: Single-track models may require resources for intersession learning, while multi-track systems may raise administrative and facility costs (Skinner, 2014). How will districts budget for these needs?
- **Academic support**: If improving students' academic outcomes is a goal, will intersessions be used for remediation? How will attendance be encouraged?
- **Stakeholder engagement**: What phased approaches, pilot programs, or outreach efforts can help districts transition smoothly?

Conclusion

In sum, evidence from studies about the implementation of year-round education suggests multi-track models may offer an effective solution for reducing overcrowding in schools (Graves et al., 2013). However, existing evidence also suggests YRE may have limited influence on students' overall academic performance. While some findings suggest academic growth for some subgroups of students such as Black and Hispanic students (Browne et al., 2012) in single-track YRE models, these outcomes are more consistently associated with students participating in the remedial sessions offered during intersession breaks than with the year-round model itself.

References

- ASCD. (2003). Teacher job satisfaction in a year-round school. *Educational Leadership*, 60(8). Retrieved March 7, 2025 from https://www.ascd.org/el/articles/teacher-job-satisfaction-in-a-year-round-school
- Brown J, Sarte S, Francis K, Rest G, Reynolds D. (2012). *Review of year-round schools.* Richmond, VA: Commonwealth of Virginia. Retrieved March 7, 2025 from https://jlarc.virginia.gov/pdfs/reports/Rpt430.pdf
- California Department of Education. (n.d.). *Year-round education program guide*. California Department of Education. Retrieved March 7, 2025 from https://www.cde.ca.gov/ls/fa/yr/guide.asp
- Cooper, H., Valentine, J. C., Charlton, K., & Melson, A. (2003). The effects of modified school calendars on student achievement and on school and community attitudes. *Review of Educational Research*, 73(1), 1-52. https://doi.org/10.3102/00346543073001001
- Finnie, R. K., Peng, Y., Hahn, R. A., Johnson, R. L., Fielding, J. E., Truman, B. I., ... & Zhang, X. (2019). Examining the effectiveness of year-round school calendars on improving educational attainment outcomes within the context of advancement of health equity: A community guide systematic review. *Journal of Public Health Management and Practice*, 25(6), 590-594.
- Fitzpatrick, D., & Burns, J. (2019). Single-track year-round education for improving academic achievement in US K-12 schools: Results of a meta-analysis. *Campbell Systematic Reviews*, 15(3), e1053. https://doi.org/10.1002/cl2.1053
- Graves, J. (2010). The academic impact of multi-track year-round school calendars: A response to school overcrowding. *Journal of Urban Economics*, 67(3), 378-391. https://doi.org/10.1016/j.jue.2009.11.004
- Graves J. (2011). Effects of year-round schooling on disadvantaged students and the distribution of standardized test performance. *Economics of Education Review*, 30(6), 1281–1305. https://doi.org/10.1016/j.econedurev.2011.04.003
- Graves, J., McMullen, S., & Rouse, K. (2013). Multi-track year-round schooling as cost saving reform: Not just a matter of time. *Education Finance and Policy*, 8(3), 300-315. https://doi.org/10.1162/EDFP a 00097
- Gregory, S., & Turcotte, M. (2022, July 12). More SC schools try year-round calendar, but benefits not guaranteed. *Post and Courier*. Retrieved March 7, 2025, from https://www.postandcourier.com/education-lab/more-sc-schools-try-year-round-calendar-but-benefits-not-guaranteed/article 8e8688be-fed9-11ec-82ff-77e270a1cd10.html#newsletter-popup
- Greenwood School District 50. (2024, August 19). D50 continues to show improvement on state test scores. *Greenwood School District 50*. https://www.gwd50.org/apps/news/article/1953171
- McMullen S. C., Rouse K. E. (2012). The impact of year-round schooling on academic achievement: Evidence from mandatory school calendar conversions. *American Economic Journal: Economic Policy*, 4(4), 230–252. https://doi.org/10.1257/pol.4.4.230

- McMullen S. C., Rouse K. E., Haan J. (2015). The distributional effects of the multi-track year-round calendar: A quantile regression approach. *Applied Economics Letters*, 22(15), 1188–1192. https://doi.org/10.1080/13504851.2015.1016204
- Navolio, M. (2023, September 22). *Benefits and drawbacks of the K-12 year-round calendar system*. Hanover Research. https://www.hanoverresearch.com/insights-blog/k-12-education/benefits-and-drawbacks-of-the-k-12-year-round-calendar-system/
- Skinner, R. (2014, June). *Year-round schools: in brief*. Congressional Research Service. Retrieved March 7, 2025 from https://sgp.fas.org/crs/misc/R43588.pdf
- Von Hippel, P.T., and Graves, J. (2023). Busting the Myths About Year-Round School Calendars: "Balanced" calendars have no academic benefit. *Education Next*, 23(2), 32-39. Retrieved March 7, 2025, from https://www.educationnext.org/busting-the-myths-about-year-round-school-calendars/
- Wake County Public School System. (n.d.). *Student assignment / assignment planning process*. Wake County Public School System. Retrieved March 7, 2025 from https://www.wcpss.net/assignmentplanning

UCONN | UNIVERSITY OF CONNECTICUT

CENTER FOR EDUCATION POLICY ANALYSIS, RESEARCH, AND EVALUATION (CEPARE)

CEPARE produces high-quality research, evaluation, and policy analysis that informs leaders and policymakers on a range of pressing issues, with a particular focus on enhancing social justice and equity across p-20 educational settings in Connecticut and beyond. CEPARE produced this Rapid Research Brief as part of the SETER Alliance, which aims to strengthen and support learning opportunities in Connecticut's Alliance districts. Learn more about CEPARE cepare.uconn.edu. Access the PDF VERSION (including all references and appendices).

Author Biography



Kristin Simmers is a PhD Candidate in the Learning Sciences program at UConn's Neag School of Education. She has over 16 years of international teaching experience and holds an M.S. in Elementary Education, M.Ed. in Curriculum and Instruction, and graduate certificates in Special Education and English as a Second Language. Her research explores teachers' understanding of the brain and learning, emphasizing the connection between education research and classroom practice. She promotes a transdisciplinary approach, integrating insights from cognitive science, neuroscience, psychology, and health to enrich educational research. Through her various professional roles, she works to bridge the gap between research and practice, fostering meaningful collaboration across disciplines.